

**IN THE CLAIMS:**

Claim 1. (Currently Amended): A water-soluble or water-dispersible polyurethane comprising a reaction product of

- A) a mixture of at least one polyether polyol a1) having an average functionality of  $\geq 3$  and at least one urethane group-containing polyether polyol a2) having an average functionality of  $\geq 4$ ,
- B) at least one C<sub>8</sub>-C<sub>22</sub> monoisocyanate,
- C) at least one (cyclo)aliphatic and/or aromatic diisocyanate,
- D) optionally at least one C<sub>8</sub>-C<sub>22</sub> monoalcohol, and
- E) optionally at least one polyisocyanate having an average functionality

of  $>2$

wherein component C) comprises isophorone diisocyanate and the starting NCO/OH equivalent ratio is between 0.5:1 to 1.2:1 and the polyurethane has a softening point of from 10°C to 80°C and

wherein the polyether alcohol mixture A) containing polyether a1) and the urethane group-containing polyether a2) is carried out by the partial reaction of the polyethers a1) with at least one organic isocyanate having a functionality of  $\geq 2$  and up to 50 mole % of the polyethers a1) are reacted with isocyanates.

Claim 2. (Previously Presented): The polyurethane of Claim 1, wherein the polyether polyol a 1) has an average functionality of 3.

Claim 3. (Previously Presented): The polyurethane of Claim 1, wherein the polyether polyol a1) has an average functionality of 4 to 6.

Claim 4. (Previously Presented): The polyurethane of Claim 1, wherein component B) comprises a C<sub>10</sub>-C<sub>18</sub> monoisocyanate.

Claim 5. (Previously Presented): The polyurethane of Claim 1, wherein component B) comprises a C<sub>12</sub>-C<sub>18</sub> monoisocyanate.

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Claim 6. (Previously Presented): The polyurethane of Claim 1, wherein component C) comprises a (cyclo)aliphatic diisocyanate.

Claim 7. (Previously Presented): The polyurethane of Claim 1, wherein component D) comprises a C<sub>10</sub>-C<sub>18</sub> monoalcohol.

Claim 8. (Previously Presented): A process for the production of a water-soluble or water-dispersible polyurethane comprising reacting

- A) a mixture of at least one polyether polyol a1) having an average functionality of  $\geq 3$  and at least one urethane group-containing polyether polyol a2) having an average functionality of 4,
  - B) at least one C<sub>8</sub>-C<sub>22</sub> monoisocyanate,
  - C) at least one (cyclo)aliphatic and/or aromatic diisocyanate,
  - D) optionally at least one C<sub>8</sub>-C<sub>22</sub> monoalcohol, and
  - E) optionally at least one polyisocyanate having a mean functionality of  $> 2$
- wherein component C) comprises isophorone diisocyanate and the starting NCO/OH equivalent ratio is between 0.5:1 to 1.2:1 and the polyurethane has a softening point of from 10°C to 80°C.

Claim 9. (Previously Presented): The process of Claim 8, wherein the urethane group-containing polyether polyol a2) is produced by a partial reaction of the polyether polyol a1) with a diisocyanate.

Claim 10. (Previously Presented): The process of Claim 8, wherein the urethane group-containing polyether polyol a2) is produced by a partial reaction of the polyether polyol a 1) with polyisocyanates having an average functionality of 2.

Claim 11 (Previously Presented): A composition of matter comprising the polyurethane of Claim 1.

**Claim 12. (Previously Presented):** The composition of Claim 11, wherein the composition is a thickened aqueous paint system, an adhesive or another aqueous formulation.

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